MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2022/2023 (TERM ID 2210)

DFM5214– FOUNDATIONS OF FINANCIAL MARKETS AND INSTITUTIONS

(All sections / Groups)

13 FEBRUARY 2023
9.00 a.m – 11.00 a.m
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 8 pages (excluding cover page) with **40 Multi Choice Questions in Part A** and **2 Structural Questions in Part B**.

2. Attempt **ALL** questions. The distribution of the marks is shown at the end of each question.

3. Please write all your answers in the answer booklet provided.

PART A: MULTI CHOICE QUESTION (60 MARKS)

Answer ALL 40 questions. Each question carries 1.5 marks.

1. A bank is solvent as long as it
   A. has enough capital to pay off depositors
   B. can meet all demands by depositors for payment
   C. has mostly good loans
   D. does not experience a run on its deposits

2. In most variable-rate mortgages, the homebuyer
   A. shares the interest rate risk with the lender
   B. assumes none of the interest rate risk
   C. assumes all the interest rate risk
   D. does not repay the principal until maturity

3. If a bank has more rate-sensitive assets than rate-sensitive liabilities, then a(n) _____ in interest rates will _____ bank profits.
   A. increase; increase
   B. increase; reduce
   C. decline; increase
   D. decline; not affect

4. The term structure of interest rates shows
   A. how interest rates vary over time
   B. the relationship between maturity and yield for similar securities
   C. the pattern of interest rates over the long-term business cycle
   D. security yields ranked by default risk structure

5. If the yield on long-term securities is greater than the yield on comparable short-term securities, the yield curve will be
   A. negatively sloped
   B. in the negative quadrant
   C. positively sloped
   D. undefined

6. Classical interest rate theory states that rising interest rates will
   A. increase the demand for money
   B. decrease the demand for money
   C. decrease investment expenditures
   D. increase the quantity of saving

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7. The relationship between the price and the interest rate for a zero-coupon bond is best described as:
   A. volatile.
   B. inverse.
   C. stable.
   D. non-existent

8. The supply of bonds increases when:
   A. government borrowing rises.
   B. the economy grows more rapidly.
   C. expected inflation rises.
   D. All the above are correct.

9. An increase in wealth is expected to cause the equilibrium price of bonds to:
   A. rise.
   B. fall.
   C. remain unchanged.
   D. change in an unpredictable manner.

10. When does a negative yield curve tend to exist?
   A. During a period of unemployment
   B. During a period of deflation
   C. During a period of full employment
   D. During a period of inflation

11. The five core principles of Money and Banking include each of the following except:
   A. time has value.
   B. all people act rationally.
   C. information is the basis for decisions.
   D. risk requires compensation.

12. The statement "risk requires compensation" implies:
   A. people will only accept risk when they are rewarded for doing so.
   B. people only accept risk when they absolutely must.
   C. people do not take risk.
   D. people do not mind the rate of return at any level of risky investment.

13. If bad credit risks are those that most actively seek and receive loans from financial intermediaries, what problem does this cause the financial intermediaries to face?
   A. Moral hazard
   B. Adverse selection
   C. Free-riding
   D. Costly state verification

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14. What is the primary function of large, diversified brokerage firms in the money market?
    A. To sell money market securities to the Bank Negara Malaysia for its open market operations
    B. To buy money market securities from corporations that need liquidity
    C. To buy Malaysian Governments Securities
    D. To make a market for money market securities by maintaining an inventory from which to buy or sell

15. What is the objective of fixed exchange rates?
    A. To prevent exchange rates from changing
    B. To prevent misallocation of economic resources
    C. To prevent the effects of one country's inflationary policies from spreading to other countries
    D. To eliminate the economic fluctuations that result from short-run, self-reversing forces

16. Monetary policy is best described as:
    A. attempts to keep inflation constant.
    B. determining the denominations and supply of a country's currency.
    C. attempts to keep inflation low and stable and growth high and stable.
    D. one of the most important functions of Government.

17. When an individual is faced with a choice between receiving a random income that on average equals RM40,000 per year or a certain income of RM40,000 per year, most individuals prefer the certain income to the one that varies because:
    A. information is the basis for decisions.
    B. stability improves welfare.
    C. markets determine prices and allocate resources.
    D. time has value.

18. Mutual funds pool the funds of savers and use them to buy:
    A. shares in mutual savings banks only.
    B. shares in the Federal Reserve system.
    C. a variety of financial instruments.
    D. None of the above is correct.

19. The future value in 1 year of RM300 deposited today at a 6% annual interest rate is:
    A. RM318.00
    B. RM282.00
    C. RM306.00
    D. None of the above.

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20. What is the distinction between debt and equity markets?
    A. Debt markets are those that are used only by individuals and firms that are on the verge of bankruptcy while equity markets provide more equitable borrowing terms to those borrowers that have sound credit ratings.
    B. Debt markets are the market for mortgages, loans, and bonds while equity markets are the markets for stocks.
    C. Debt markets are used primarily by those that are buying financial instruments using borrowed funds, while equity markets allow people to buy financial assets using only their own funds.
    D. None of the above is correct.

21. Suppose that Joe receives a one-year simple loan from Bank A for RM9,000.00. At the end of the year Joe repays RM9,720.00 to Bank A. The interest rate on Joe's loan was:
    A. RM800.
    B. 8.0%.
    C. 7.2%.
    D. None of the above is correct.

22. An individual is promised a RM1,000 payment one year from today. If she faces an interest rate of 5%, how much would she would be willing to accept today in exchange for this future payment?
    A. RM1005.00
    B. RM1050.00
    C. RM952.38
    D. RM950.00

23. A change in the interest rate has:
    A. will not have a difference on the present value of two equal payments to be made at different times.
    B. a larger impact on the present value of a payment to be made far into the future than one to be made sooner.
    C. a smaller impact on the present value of a payment to be made far into the future than one to be made sooner.
    D. None of the above.

24. The real interest rate is approximately equal to:
    A. nominal interest rate – the expected inflation rate.
    B. nominal interest rate / price index.
    C. nominal interest rate x price index.
    D. nominal interest rate + the expected inflation rate.

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25. Under the expectations hypothesis, if people expect interest rates to be stable over time, yield curves would be:
    A. upward sloping.
    B. downward sloping.
    C. vertical.
    D. horizontal.

26. The Fisher Effect primarily emphasizes the effects of _____ risk on an investor's rate of return.
    A. default
    B. interest rate
    C. inflation
    D. market

27. Assuming that the term structure of interest rates is determined as posited by the pure expectations theory, which of the following statements is CORRECT?
    A. In equilibrium, long-term rates must be equal to short-term rates.
    B. The maturity risk premium is assumed to be zero.
    C. Inflation is expected to be zero.
    D. An upward-sloping yield curve implies that future short-term rates are expected to decline.

28. Which of the following statements is incorrect?
    A. The real interest rate can be negative.
    B. Higher nominal interest rates are usually associated with higher inflation rates.
    C. Higher real interest rates are usually associated with higher inflation rates.
    D. It is easier to compute the ex post real interest rate than the ex ante real interest rate.

29. Which of the following is not a characteristic of a well-run financial market?
    A. The information the market pools and communicates is accurate and widely available.
    B. Prices only adjust slowly to be sure that the information they reflect is verified.
    C. Investors need protection and proper safeguards.
    D. The market is designed to keep transaction costs low.

30. A risk-averse investor will:
    A. always prefer an investment with a certain return to one with the same expected return but any amount of uncertainty.
    B. always require a certain return.
    C. always prefer an investment with a lower expected return.
    D. always focus exclusively on the expected return.

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31. Long-term government bonds offer higher interest rates than short-term government bonds, in part, because:
    A. individuals must be compensated if they are to give up the use of their funds for longer periods.
    B. the government wishes to discourage people from buying short-term bonds.
    C. the higher interest rates on long-term bonds are really a marketing gimmick and are equivalent to the interest that would be received if people held a sequence of short-term bonds over the longer time period.
    D. None of the above is correct.

32. Asymmetric information in financial markets is a potential problem usually resulting from:
    A. too much information being provided to market participants by third-party information providers.
    B. borrowers having more information than lenders, and having no incentive to disclose adverse information.
    C. lenders having more information than borrowers, allowing lenders to exploit naive borrowers.
    D. excessive speculation in derivative markets.

33. All other factors held constant:
    A. an investment with less risk should sell for a lower price and offer a higher return.
    B. an investment with more risk should offer a lower return and sell for a higher price.
    C. an investment with less risk should sell for a lower price and offer a lower return.
    D. an investment with more risk should sell for a lower price and offer a higher return.

34. An increase in the liquidity of bonds relative to other assets is expected to cause the equilibrium price of bonds to:
    A. fall.
    B. rise.
    C. remain unchanged.
    D. change in an unpredictable manner.

35. An increase in the risk of bonds relative to other assets is expected to cause the equilibrium price of bonds to:
    A. rise.
    B. fall.
    C. remain unchanged.
    D. change in an unpredictable manner.

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36. Interest-rate risk is larger for:
    A. long-term bonds.
    B. short-term bonds.
    C. government bonds.
    D. None of the above is correct.

37. The *risk spread* is:
    A. the difference between a bond's purchase price and selling price.
    B. positive for all U.S. Treasury bonds.
    C. assigned by a bond rating agency.
    D. the difference between the bond's yield and the yield on a U.S. Treasury bond of the same maturity.

38. As the risk associated with a bond rises, the price of the bond will _____ and the yield will _____.
    A. rise; fall
    B. fall; rise
    C. fall; fall
    D. rise; rise

39. The expectations hypothesis *does not* suggest that the:
    A. slope of the yield curve depends on the expectations for future short-term rates.
    B. yield curve should usually be downward sloping.
    C. slope of the yield curve is positive if people expect higher future short-term interest rates.
    D. slope of the yield curve is negative if people expect short term interest rates to fall in the future.

40. Considering the liquidity premium theory, if investors expect short-term interest rates to decrease, then the:
    A. yield curve must be inverted.
    B. yield curve could be flat.
    C. yield curve must have a positive slope.
    D. slope of the yield curve should increase.

(Total: 60 marks)

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PART B: STRUCTURAL QUESTIONS

Answer ALL Questions. Each question carries 20 marks.

QUESTION 1 (20 MARKS)

Ultimetro Berhad has a bond that pays 7% coupon rate annually. The bond has a face value of RM1,000. Assume the current interest is 8%. The maturity period is 5 years, after which it can be redeemed at par. As a finance officer, advice finance director on below information needed:

i. The current bond's value (5 marks)

ii. The duration or effective maturity of the bond (13 marks)

iii. The fund's exposure to a loss if interest rates rise to 9% tomorrow. (2 marks)

QUESTION 2 (20 MARKS)

According to Mishkin, Frederic S. and Stanley G. Eakins (2019), there are three theories have been put forward to explain the term structure of interest rates - that is, the relationship among interest rates on bonds of different maturities reflected in yield curve patterns, namely; (1) the expectations theory, (2) the market segmentation theory, and (3) the liquidity premium theory.

How does the Segmented Markets theory differ from the Expectations Theory? Explain.

(20 marks)

(Total: 40 marks)

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